### Industrial Engineering

**IE 398  Special Topics**  credit: 1 TO 4 hours.

Subject offerings of new and developing areas of knowledge in industrial engineering intended to augment the existing curriculum. See Class Schedule or departmental course information for topics and prerequisites. May be repeated in the same or separate terms if topics vary.

<table>
<thead>
<tr>
<th>CRN</th>
<th>Type</th>
<th>Section</th>
<th>Time</th>
<th>Days</th>
<th>Location</th>
<th>Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>69146</td>
<td>Lecture</td>
<td>DL</td>
<td>08:00 AM - 09:20 AM</td>
<td>TR</td>
<td>1404 - Siebel Center for Comp Sci</td>
<td>Sirignano, J</td>
</tr>
</tbody>
</table>

Credit Hours: 3 hours

Deep Learning

Restricted to Engineering. Restricted to students with Junior or Senior class standing. Restricted to Undergrad - Urbana-Champaign.

Prerequisites: IE 300 and Math 415 (or equivalent courses). Deep learning has revolutionized image, text, and speech recognition. There's also growing interest in applying deep learning to science, engineering, medicine, and finance. This course covers convolution neural networks, recurrent neural networks, and deep reinforcement learning. Students will learn how to train deep learning models using PyTorch and GPU computing.